

Welcome to Compression Train Configurator

Please select one from the above menu

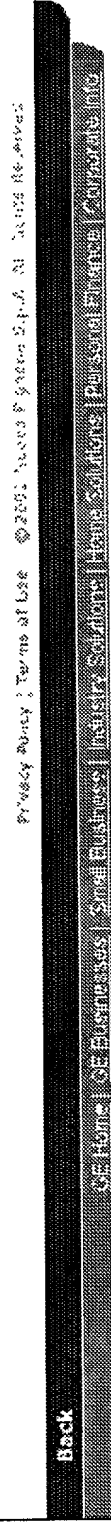


Fig. 1

GE Power Systems
Oil & Gas
Nuovo Pignone - Upstream

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[New Configuration](#)
[New RFQ](#)
[Layout Design](#)

List of Projects

	Project Title	Date	RFQ
	TEST1	01.23.2001	rfq
TEST1			
	TEST2	01.26.2001	rfq
TEST2			
	TEST3	01.27.2001	rfq
test3			
	TEST4	01.30.2001	
TEST4			
	Test5	01.31.2001	
Test5			
	gazele	01.31.2001	
testing			
	test2a1	01.31.2001	
td			

open

rename

delete

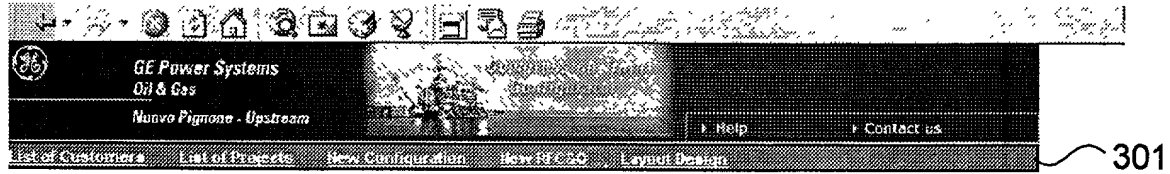
Back

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Fig. 2

300



Configurations

310

304 305 306

Project Title: TEST1 303

View RFC&O List

	Name	Date	Train Components	View	View	RFQ
304		01.11.2001	EHASVNC7876KW + GB + 2BCL1006	chk	dsh	
	LH2500	01.11.2001	LH2500 + GB + BCL1404/C	chk	dsh	
	male e elettrico	01.11.2001	EHASVNC4810KW + GB + BCL1404	chk	dsh	
	PGT10	01.11.2001	PGT10 + GB + BCL1501	chk	dsh	
	Test	01.11.2001	GEI6 + GB + BCL1506	chk	dsh	
	Conf1	01.11.2001	FRAMESC + GB + BCL1404/A + BCL1355/B	chk	dsh	
	4	01.11.2001	LH2500 + GB + BCL1404/A + BCL1355/B	chk	dsh	
	ca+12	01.11.2001	LH2500 + GB + BCL1404/A + BCL1355/B	chk	dsh	
	12	01.11.2001	FRAMESD + GB + BCL1404/B + BCL1355/C	chk	dsh	
	PAOLO	01.11.2001	LH2500 + GB + BCL1507/A	chk	dsh	
	68	01.11.2001	LH2500 + GB + BCL1502/W	chk	dsh	
	Page	02.01.2001	LH2500 + GB + BCL1404/A + BCL1355/B	chk	dsh	
	1146	02.01.2001	EHASVNC1050KW + GB + BCL1255 + 2BCL1257	chk	dsh	

302

open

rename

delete

307

308

309

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Fig. 3

09753303760

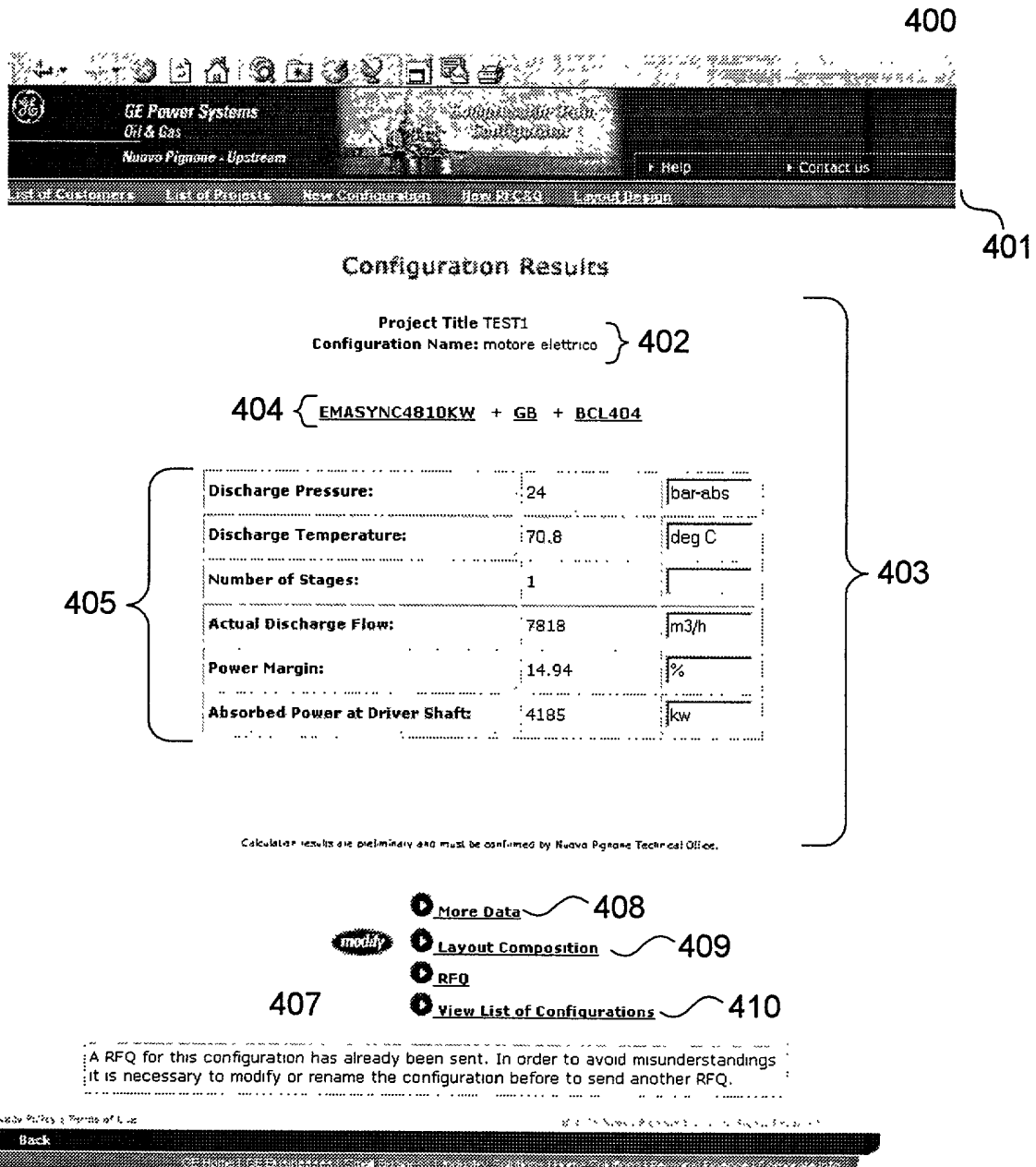
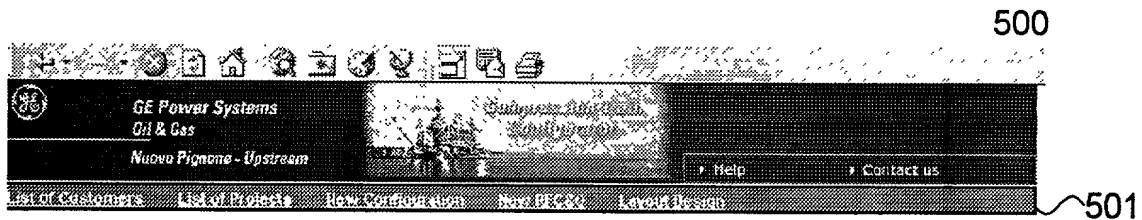


Fig. 4



Configuration Results

Project Title TEST1
Configuration Name: motore elettrico } 502

504 EMASYN4810KW + GB + BCL404

505	Discharge Pressure:	24	bar-abs	503
	Discharge Temperature:	70.8	deg C	
	Number of Stages:	1		
	Actual Discharge Flow:	7818	m3/h	
	Power Margin:	14.94	%	
	Absorbed Power at Driver Shaft:	4185	kw	

Calculation results are preliminary and must be confirmed by Nuovo Pignone Technical Office

- 508
- 507 [More Data](#)
- [Layout Composition](#) 509
- [RFQ](#) 511
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Fig. 5

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[New BLOC](#)
[Layout Upgrade](#)

New Configuration

Plant General data

Unit System SI

Compression Service Not Specified

Environment Conditions

Environmental Design Pressure* Asl m

Design Temperature* deg C
Relative Humidity* %

Driver Specifications

Driver Type Optimized
Model Optimized

Gas Turbine Data

Fuel Type Process Gas

Electrical Frequency 50 Hz

Compressor Speed rpm

[Back](#)

Fig. 6

700

New Configuration

701

Compression Data

Gas State Equation Optimized Race Application Not

706

Process Gas *

Handled Flow * Mass Flow kg/s

702

Suction Pressure * bar-abs Suction Temperature * deg C
Discharge Pressure * bar-abs Max Temperature 170 deg C

Compressor Options

Stage Number Optimized

Casing Type

Horizontally Split Not
Back-To-Back Yes
Double Flow Not
Max Peripheral Speed of Impellers 280 m/s

703

Stage Compression Ratios as Percentage of 1st Stage

2° Stage %
3° Stage %
4° Stage %

Casing Model and Size

1° Casing Model Optimized 2° Casing Model Optimized 3° Casing Model Optimized
1° Casing Size Optimized 2° Casing Size Optimized 3° Casing Size Optimized

Interstage Data

Gas Cooler Discharge Temperature 55 deg C Max Stage Suction Temperature 120 deg C

Interstage Pressure Drop

Between 1° & 2° Stages 25 %
Between 2° & 3° Stages 25 %
Between 3° & 4° Stages 25 %

704

Interstage Discharge Pressures

1° Stage bar-abs
2° Stage bar-abs
3° Stage bar-abs

705

Fig. 7

Fuel Gas Composition

Water Content

Reference humidity

%

Reference temperature

deg C

Reference pressure

bar-abs

Water

%

Please fill the above field to insert the water value. If you want insert the relative humidity of gas composition use the "relative humidity" box. "reference pressure" and "reference temperature". If you want insert the water quantity of gas composition fill the "water" box. If you don't want insert water value leave all field blank.

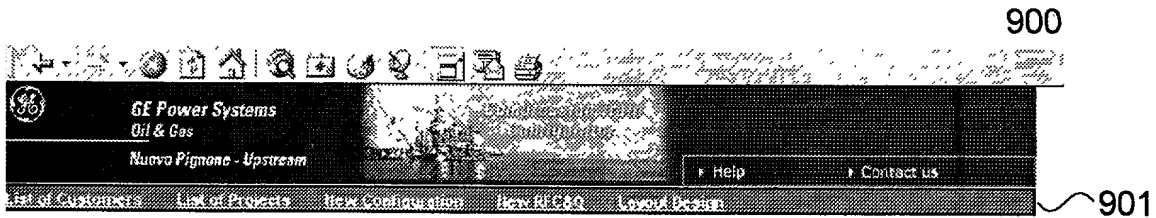
Gas Composition

Type of Measures Moles

Component name	Quantity(%) *	Component name	Quantity(%) *
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	00	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	00
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	00	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	00
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0
<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0	<div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">->Select v</div>	0.0

Confirm

Fig. 8



Process Gas Composition

Water Content

Reference humidity %

Reference temperature deg C

Reference pressure bar-abs

Water %

902

Please fill the above field to insert the water value. If you want insert the relative humidity of gas composition use the "relative humidity" box "reference pressure" and "reference temperature". If you want insert the water quantity of gas composition fill the "water" box. If you don't want insert water value leave all field blank.

Gas Composition

Type of Measures

Component name	Quantity(%) *	Component name	Quantity(%) *
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>
<input type="text" value="->Select"/>	<input type="text" value="0.0"/>	<input type="text" value="->Select"/>	<input type="text" value="0.0"/>

903

confirm

904

Fig. 9

The screenshot shows the GE Power Systems website. The top navigation bar includes links for Home, Products, Services, and About Us. The main content area features the GE logo, the text "GE Power Systems Oil & Gas", and a large image of an offshore oil rig. Below the image, there is a section titled "Nuova Pignone - Upstream" and a "Help" button. The bottom of the page shows a list of customers and projects.

Configuration Results

PGT5 + GB + BCL801

1002

Discharge Pressure:	8.00	bar-abs
Discharge Temperature:	25.87	deg C
Number of Stages:	1	
Actual Discharge Flow:	34359.2	m ³ /h
Power Margin:	15.21	%
Absorbed Power at Driver Shaft:	1363.	kW

Calculation results are preliminary and must be confirmed by Nuova Pignone Technical Office

1006 **save** → 1007 **modify** → 1008 **More Data** → 1009 **Layout Composition** → 1010 **View List of Configurations**

Fig. 10

1100

1101

More Data

Driver Data

Description	Overall	
Discharge Pressure:	8.00	bar-abs
Driver Model:	PGT5	
Actual Discharge Flow:	34359.2	m3/h
Absorbed Power at Driver Shaft:	1363.	kw
Power Margin:	15.21	%
Electrical Frequency:	50	hz

1103

Compression Data

Description	Stage 1	Stage 2	Stage 3	Stage 4	
Molecular Weight:	16.043				1/mole
Handled Flow: Mass Flow	50				kg/s
Suction Pressure:	7.00				bar-abs
Suction Temperature:	15.00				deg C
Suction Actual Flow:	37843.5				m3/h
Discharge Pressure:	8.00				bar_abs
Discharge Temperature:	25.87				deg C
Discharge Actual Flow:	34359.2				m3/h
Impeller Number:	1				
Speed:	4024.				rpm
Politropic Efficiency:	84.46				%

1104

	Model	Type	Size	Impeller Number:	Rating
Compressor Casing 1	BCL801	BCL	800	1	600
Compressor Casing 2					
Compressor Casing 3					

1105

back

1106

Fig. 11

Back

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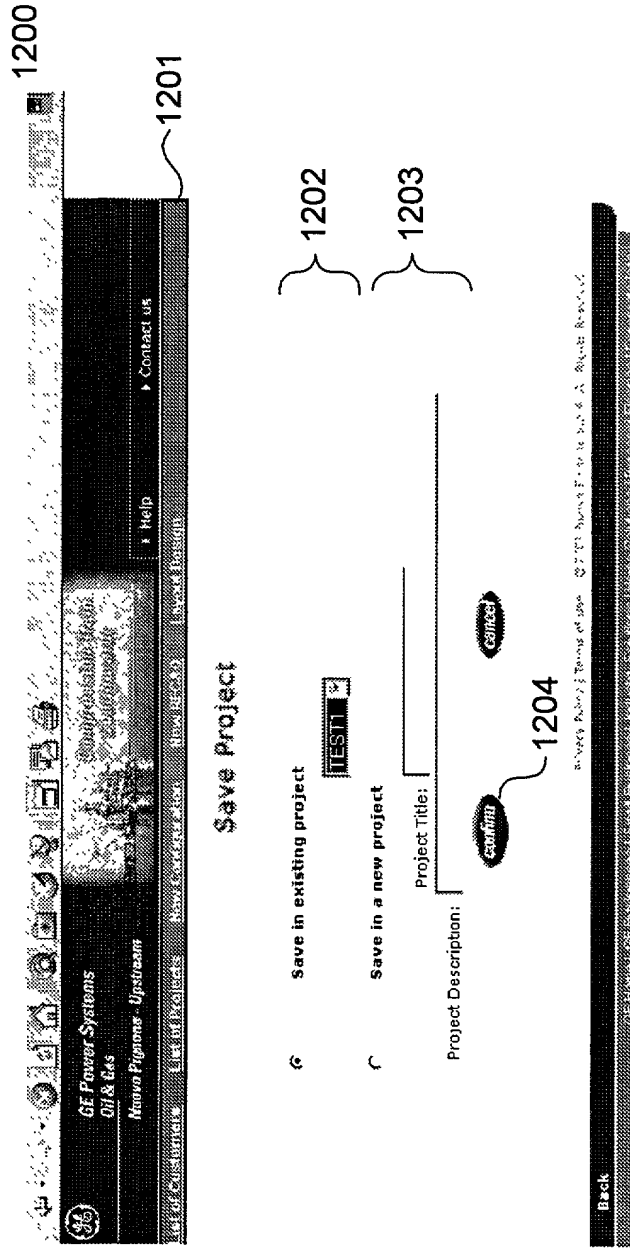


Fig. 12

1300

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Find Customers List of Products New Configuration New RFC&Q Layout Design

New RFC&Q 1301

Plant General data

Unit System Compression Service 1302

Environment Conditions

Environmental Design Pressure* 1303

Design Temperature* Relative Humidity*

Driver Specifications

Driver Type Model 1304

Gas Turbine Data

Fuel Type Electrical Frequency

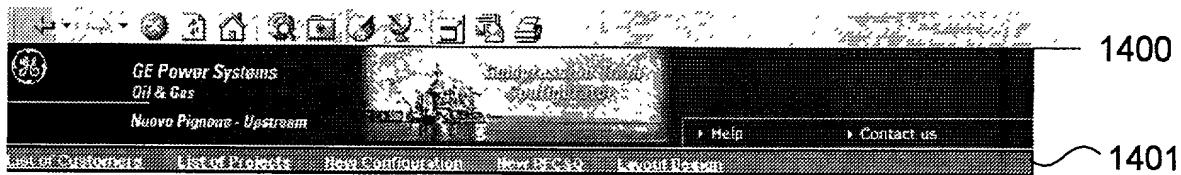
Compressor Speed

next 1306

Back

File View History Settings Help

Fig. 13



New RFC&Q

Compression Data

Gas State Equation

Nace Application

Stage Number

	Stages					
	Optimized	1st	2nd	3rd	4th	
Handled Flow <input type="text" value="Mass Flow"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	kg/s
Suction Pressure *	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	bar-abs
Suction Temperature *	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	deg C
Discharge Pressure *	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	bar-abs

Process Gas * ☐

1403

Max Temperature * deg C

Compressor Options

Casing Type

Horizontally Split	<input type="text" value="Not"/>
Back-To-Back	<input type="text" value="Yes"/>
Double Flow	<input type="text" value="Not"/>
Max Peripheral Speed of Impellers *	<input type="text" value="280"/> m/s

1404

Interstage Data

Gas Cooler Discharge Temperature * deg C

Max Stage Suction Temperature * deg C

Interstage Pressure Drop

Between 1° & 2° Stages *	<input type="text" value="2.5"/>	<input type="text" value=""/>
Between 2° & 3° Stages *	<input type="text" value="2.5"/>	<input type="text" value=""/>
Between 3° & 4° Stages *	<input type="text" value="2.5"/>	<input type="text" value=""/>

1405

next

1406

Fig. 14

Back

1500

GE Power Systems
Oil & Gas

Nuova Pignone - Upstream

Compressor Data
Configuration

Help Contact us

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[List of Projects](#)
[New Configuration](#)
[New RFC&Q](#)
[Load Data](#)

RFC&Q Summary Data

1501

General Data

Compression Service	Not Specified
Driver Type:	Optimized
Driver Model:	OGT
Direct Coupling:	Not

1503

Compression Data

Description	Optimized	Stage 1	Stage 2	Stage 3	Stage 4	
Handled Flow: Mass Flow	1					kg/s
Suction Pressure:	1					bar-abs
Suction Temperature:	1					deg C
Discharge Pressure:	1					bar-abs

1504

save

1505

modify

1506

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Fig. 15

Nuovo Pignone - Upstream

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[List of Projects](#)
[New Configuration](#)
[New RFC&Q](#)
[Export Data](#)

RFC&Q Summary Data

Project Title: TEST1
RFC&Q Name: gra

General Data

Compression Service	Not Specified
Driver Type:	Optimized
Driver Model:	OGT
Direct Coupling:	Not

Compression Data

Description	Optimized	Stage 1	Stage 2	Stage 3	Stage 4	
Handled Flow: Mass Flow	1					kg/s
Suction Pressure:	1					bar-abs
Suction Temperature:	1					deg C
Discharge Pressure:	1					bar-abs

modify

1606

RFQ

List Of Verifications

View List of RFC&Q

1607

1608

1605

Fig. 16



RFC&Q

Project Title: TEST1

1705 1706 1707

[Back to Configurations List](#)

	Name	Date	View	View	RFQ
2	2	01.26.2001	chk	dsh	rfq 01.27.2001
piave ver	piave ver	01.29.2001	chk	dsh	rfq 01.29.2001
9	9	01.29.2001	chk	dsh	rfq 01.30.2001
piave	piave	01.30.2001	chk	dsh	rfq 01.30.2001
piave ver 3end	piave ver 3end	01.30.2001	chk	dsh	rfq 01.30.2001
piave9	piave9	01.30.2001	chk	dsh	rfq 01.30.2001
piave 1	piave 1	01.31.2001	chk	dsh	rfq 01.31.2001
RT	RT	01.31.2001	chk	dsh	

open

refresh

delete

1708

1709

1710

Back

Fig. 17

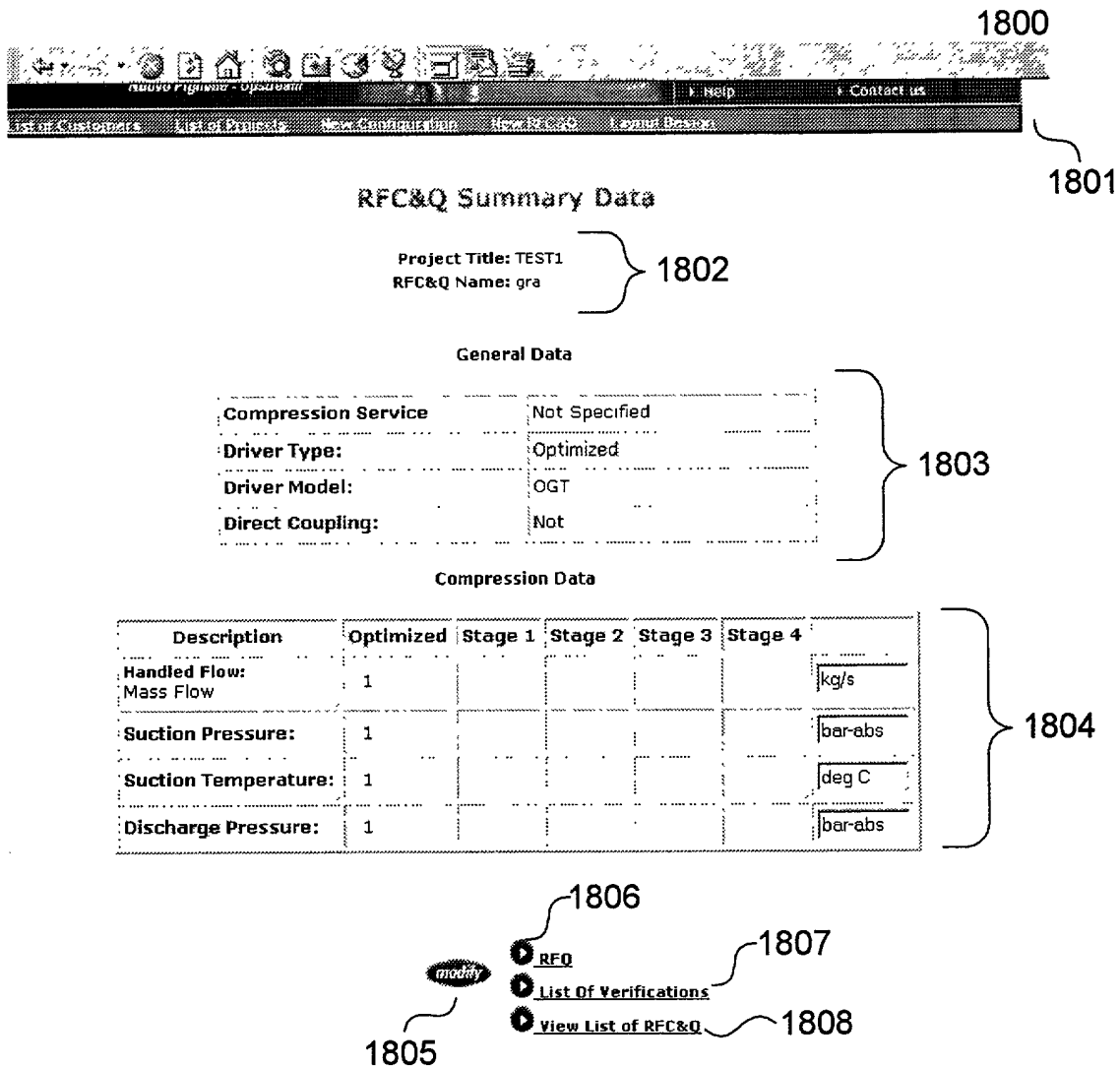






Fig. 18


GE Power Systems
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[List of Customers](#)
[List of Projects](#)
[New Configuration](#)
[New VES-20](#)
[Layout Design](#)

2001

Plant General data


- 2002

Environmental Design Pressure: Asl : 0 m

- 2003

Driver Specifications

2004

<u>Fuel Type</u>	Process Gas	
<u>Fuel Mole Weight</u>		1/mole
<u>Fuel Low Heat Value</u>	1500	kJ/kg
 Fuel Gas		

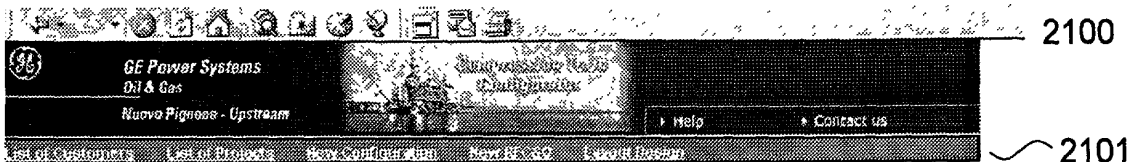
Compressor Speed rpm

2005

next ~~~~~ **2006**

[Back](#)

Fig. 20



New RFC&Q

Project Name: TEST1
RFC&Q Name: gra

Compression Data

Gas State Equation: Optimized

Nace Application: Not

Stage Number: Optimized

		Stages				
		Optimized	1st	2nd	3rd	4th
Handled Flow:	Mass Flow			35		
						kg/s
Suction Pressure *				60		
						bar-abs
Suction Temperature *				55		
						deg C
Discharge Pressure *				100		
						bar-abs

Process Gas *

All Stages

Max Temperature: 170 deg C

Compressor Options

Casing Type

Horizontally Split:	Not
Back-To-Back	Yes
Double Flow	Not
Max Peripheral Speed of Impellers	280 m/s

Interstage Data

Gas Cooler Discharge Temperature * 55 deg C

Max Stage Suction Temperature 120 deg C

Interstage Pressure Drop

Between 1° & 2° Stages	2.5	%
Between 2° & 3° Stages	2.5	%
Between 3° & 4° Stages	2.5	%

Next

2107

Fig. 21

Back

106180-0029460

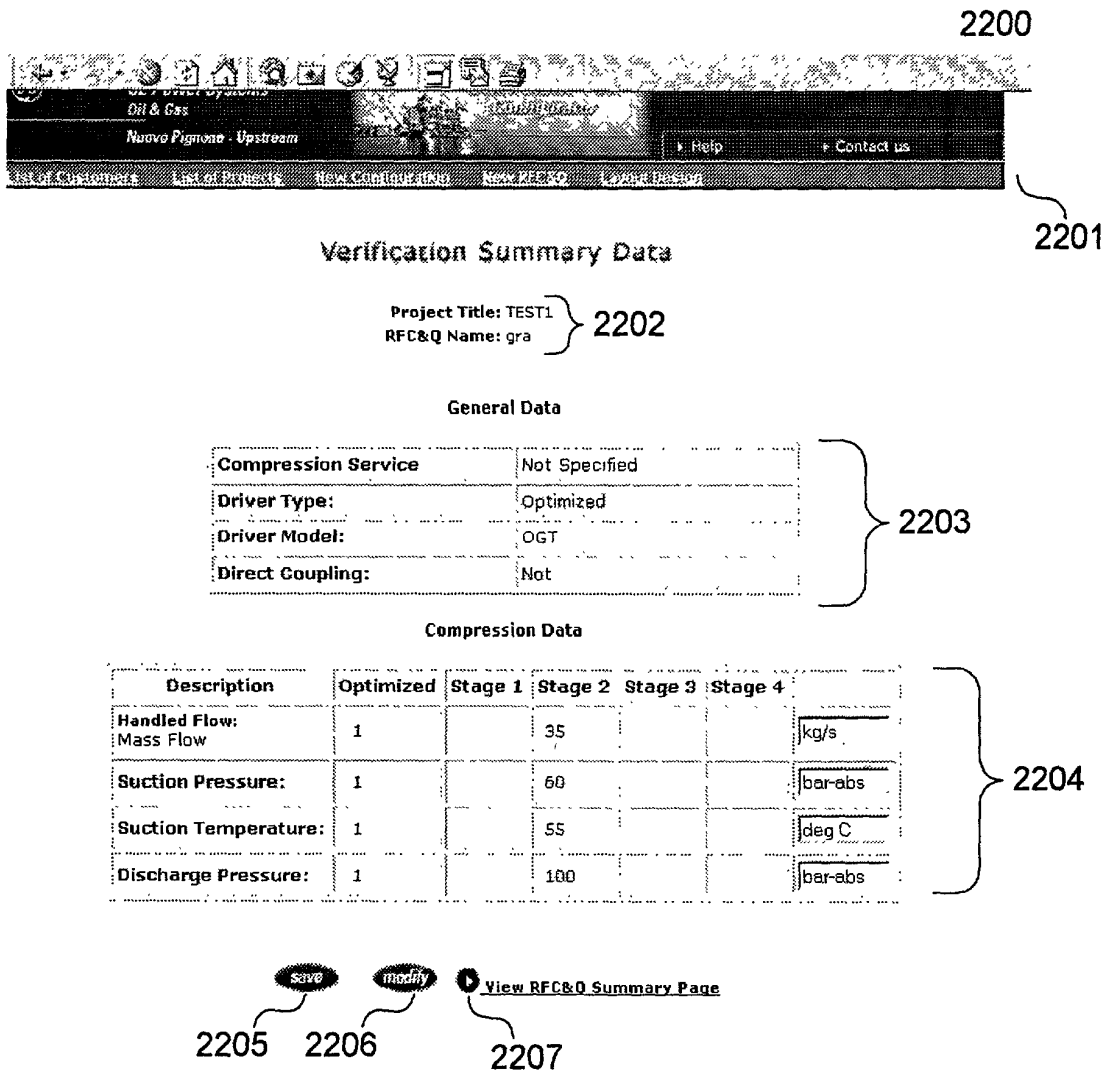


Fig. 22

FIG. 23

2300

2301

GE Power Systems
Oil & Gas
Nuova Pignone - Upstream

Help Contact us

List of Customers List of Projects New Configuration New P&ID Layout Design

New Layout

Project Data

Project Name Configuration

Driver Specifications

Driver Gearbox

Compressor Casings

	Type	Impeller	Rating
Compressor Casing 1			
Compressor Casing 2			
Compressor Casing 3			

2302

2303

2304

design 2305

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Fig. 23

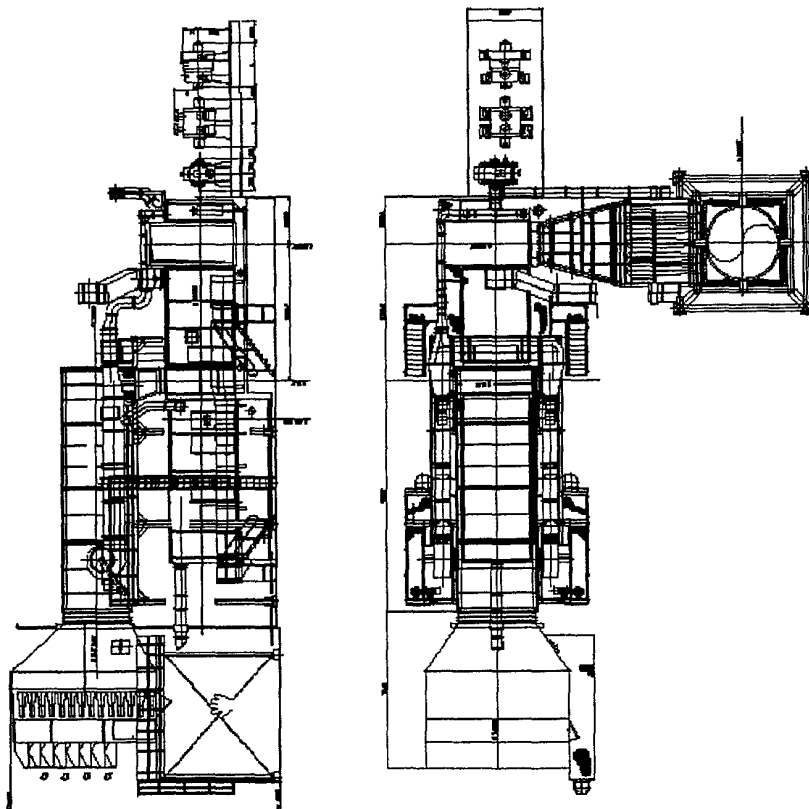


Fig. 24

Compressor Checklist

Final User: _____

Country: State:

Number of Trains to be quoted (each handling 100% of the flow indicated in datasheets)

Unit Location

Date Required for Response _____

1. Delivery (According to Incoterms 1990)

☒ Ex-Works ☐ F.C.A.
☐ F.A.S. ☐ F.O.B. Port of Shipment: _____
☐ C&F ☐ C.I.F. Port of Destination: _____
☐ D.D.U. Place of Shipment: _____

2. Type of Installation

3. Forecasted year of installation _____

4. Compression Train Baseplate

☒ Multipoint Baseplate ☐ Three-Points Single Lift Baseplate

5. Gas Turbine Combustion System

☒ STD Combustor ☐ DLE
☐ Water Injection ☐ Steam Injection

6. Turbine Inlet System

☒ Included ☐ Not Included

7. Turbine Exhaust System

☒ Included ☐ Not Included

8. Battery & Battery Charger System

☐ Included ☒ Not Included

9. Compressor Seals

☒ Dry Gas ☐ Oil

10. Antisurge Controls, Instrumentation & Valves

☐ Included ☒ Not Included

11. Test

☐ Full Load/Speed/Pressure String Test ☐ ASME PTC10 Class 1 String Test
☐ ASME PTC10 Class 3 Performance Test for Compressor ☐ No Load/Full Speed/Pressure String Test
☐ STD Gas Turbine No Load Mechanical Running Test

12. Date Required for Response (mm.dd.yyyy)

confirm

Back

Fig. 25

Electric Motor Checklist

Final User:

Country: State:

Number of Trains to be quoted (each handling 100% of the flow indicated in datasheets)

Unit Location

Date Required for Response

1. Delivery (According to Incoterms 1990)

☒ Ex-Works ☐ F.C.A.
☐ F.A.S. ☐ F.O.B.
☐ C&F ☐ C.I.F.
☐ D.D.U.

Port of Shipment:
 Port of Destination:
 Place of Shipment:

2. Type of Installation

3. Forecasted year of installation

4. Compression Train Baseplate

☒ Separate Multipoint Baseplate for Driver and Compressor ☐ Common Multipoints Baseplate

5. Gas Turbine Combustion System

☒ STD Combustor ☐ DLE
☐ Water Injection ☐ Steam Injection

6. Turbine Inlet System

☒ Included ☐ Not Included

7. Turbine Exhaust System

☒ Included ☐ Not Included

8. Battery & Battery Charger System

☐ Included ☒ Not Included

9. Compressor Seals

☒ Dry Gas ☐ Oil

10. Antisurge Controls, Instrumentation & Valves

☐ Included ☒ Not Included

11. Test

☐ Full Load/Speed/Pressure String Test ☐ ASME PTC10 Class 1 String Test
☐ ASME PTC10 Class 3 Performance Test for Compressor ☐ No Load/Full Speed/Pressure String Test
☐ STD Gas Turbine No Load Mechanical Running Test

12. Date Required for Response (mm.dd.yyyy)

Fig. 26

confirm

Back

Turbocompressor Checklist

Final User: _____

Country: State:

Number of Trains to be quoted (each handling 100% of the flow indicated in datasheets)

Unit Location

Date Required for Response

1. Delivery (According to Incoterms 1990)

- ☒ Ex-Works ☐ F.C.A.
☐ F.A.S. ☐ F.O.B.
☐ C&F ☐ C.I.F.
☐ D.D.U.
- Port of Shipment: _____
 Port of Destination: _____
 Place of Shipment: _____

2. Type of Installation

3. Forecasted year of installation

4. Compression Train Baseplate

- ☒ Separate Multipoint Baseplate for Driver and Compressor ☐ Common Multipoints Baseplate

5. Gas Turbine Combustion System

- ☒ STD Combustor ☐ DLE
☐ Water Injection ☐ Steam Injection

6. Turbine Inlet System

- ☒ Included ☐ Not Included

7. Turbine Exhaust System

- ☒ Included ☐ Not Included

8. Battery & Battery Charger System

- ☐ Included ☒ Not Included

9. Compressor Seals

- ☒ Dry Gas ☐ Oil

10. Antisurge Controls, Instrumentation & Valves

- ☐ Included ☒ Not Included

11. Test

- ☐ Full Load/Speed/Pressure String Test ☐ ASME PTC10 Class 1 String Test
☐ ASME PTC10 Class 3 Performance Test for Compressor ☐ No Load/Full Speed/Pressure String Test
☐ STD Gas Turbine No Load Mechanical Running Test

12. Date Required for Response (mm.dd.yyyy)

Fig. 27



007/533 00100

2800

GE Power Systems
Oil & Gas
Nuovo Pignone - Upstream

Help Contact us

List of Customers List of Projects New Configuration New RFC&Q Export Data

Send RFQ

2801

Project Title: TEST1
RFC&Q Name: gra

2802

To: danielle.badiani@np.ge.com
Subject:
From Address: stefano.lanfredi@np.ge.com
From Name: Stefano Lanfredi
Message:

2803

2804 View CHK

send rfq

2805 View DSH

2806 View RFC&Q Results

2807

Back

Fig. 28

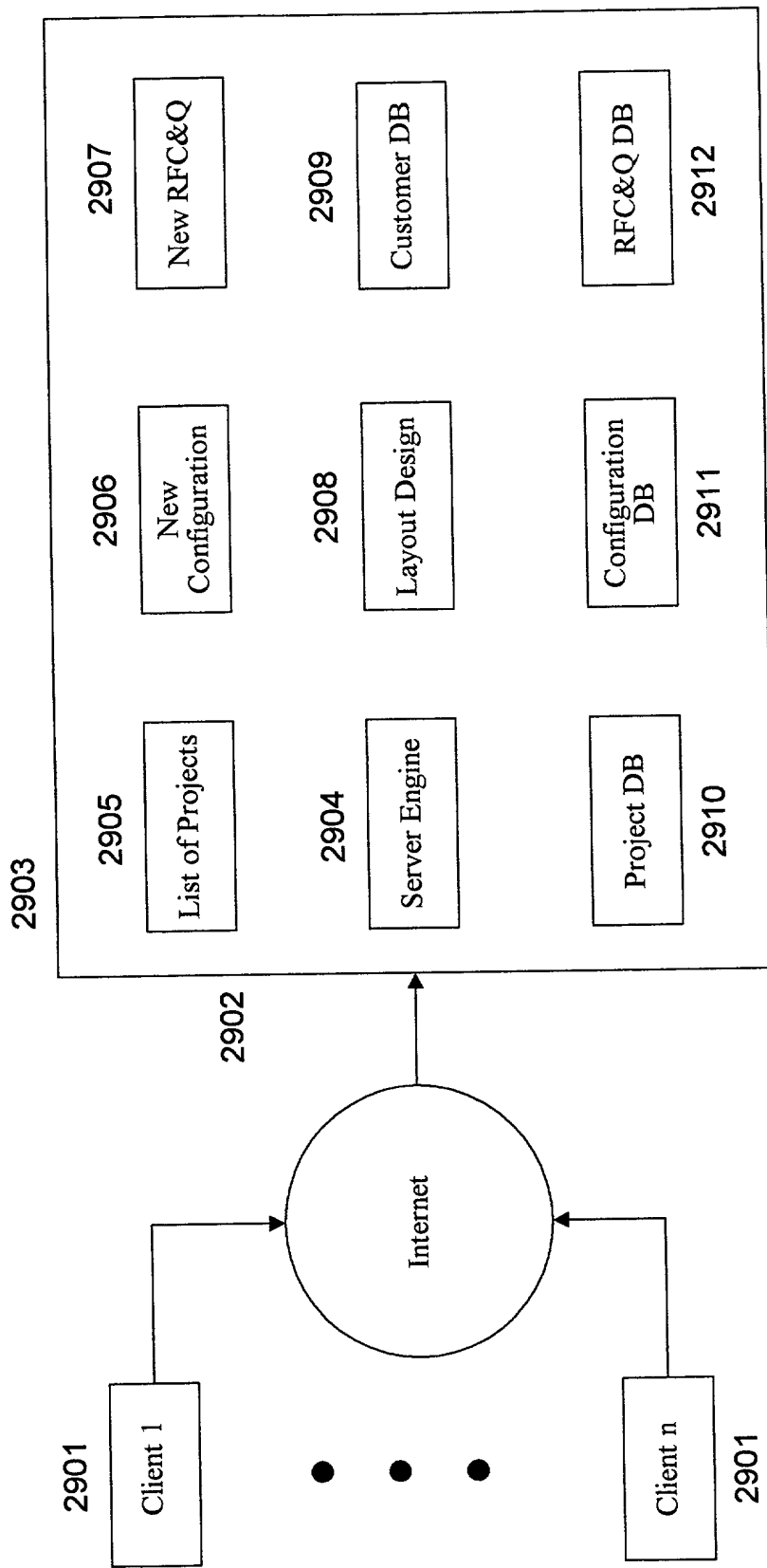


Fig. 29

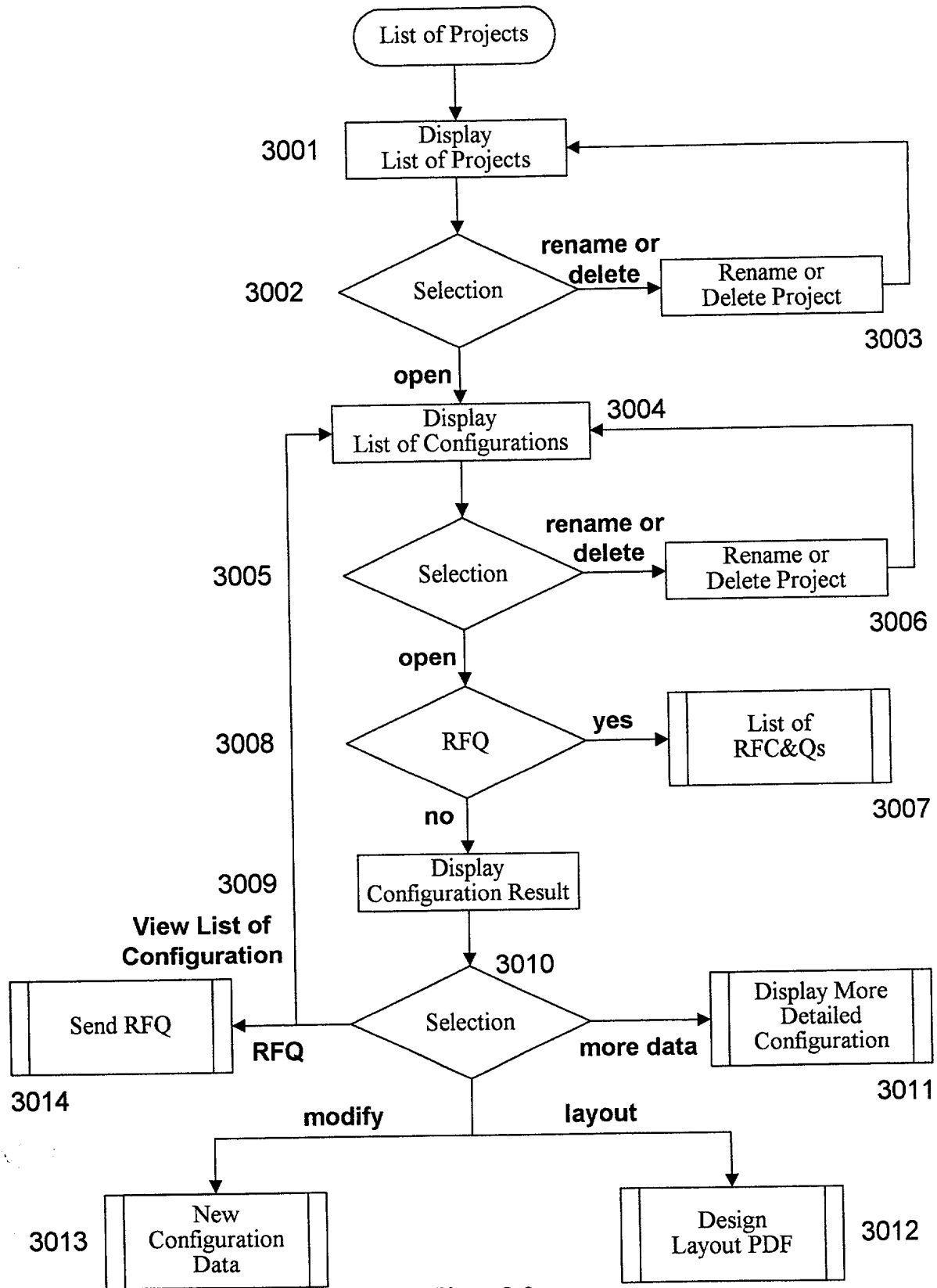


Fig. 30

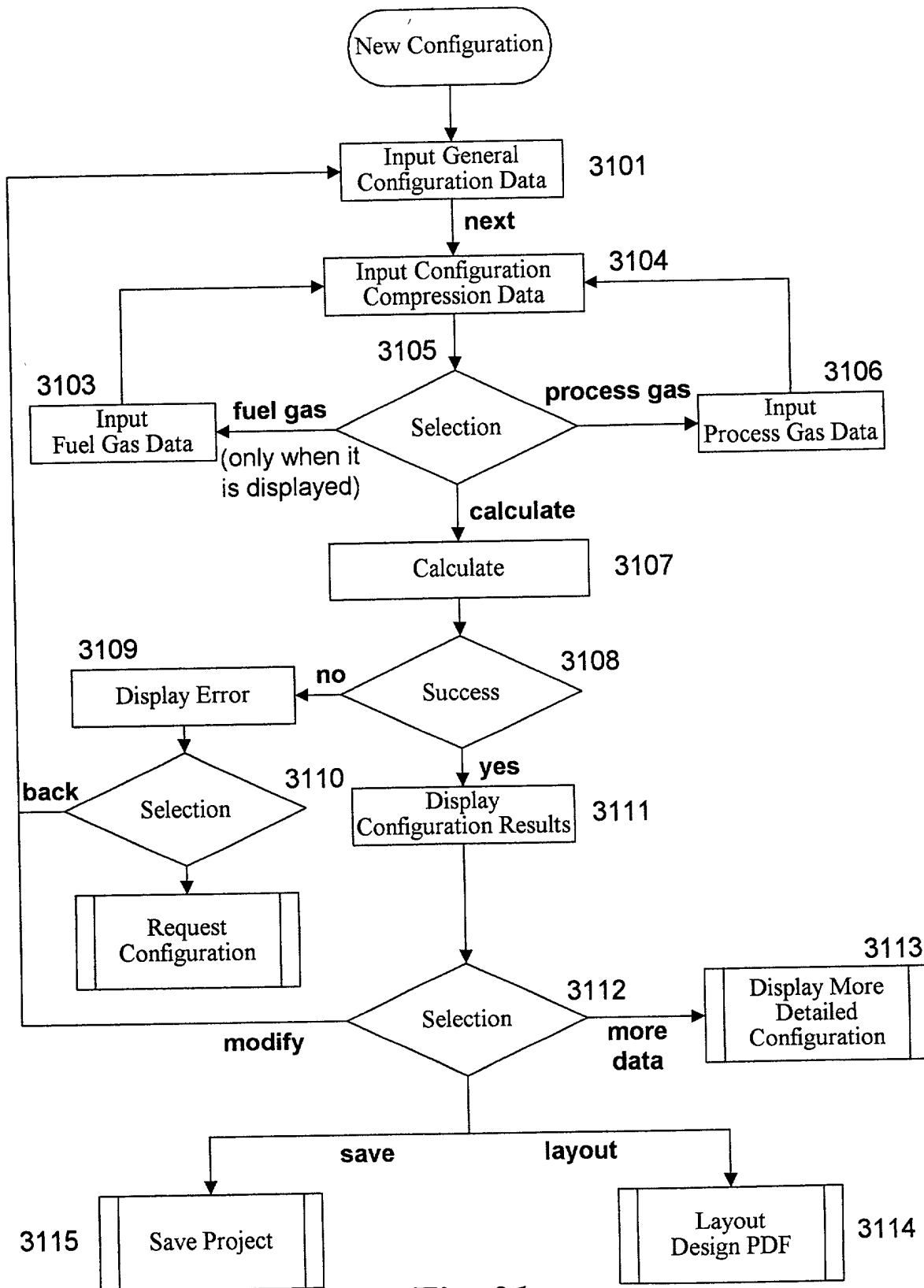


Fig. 31

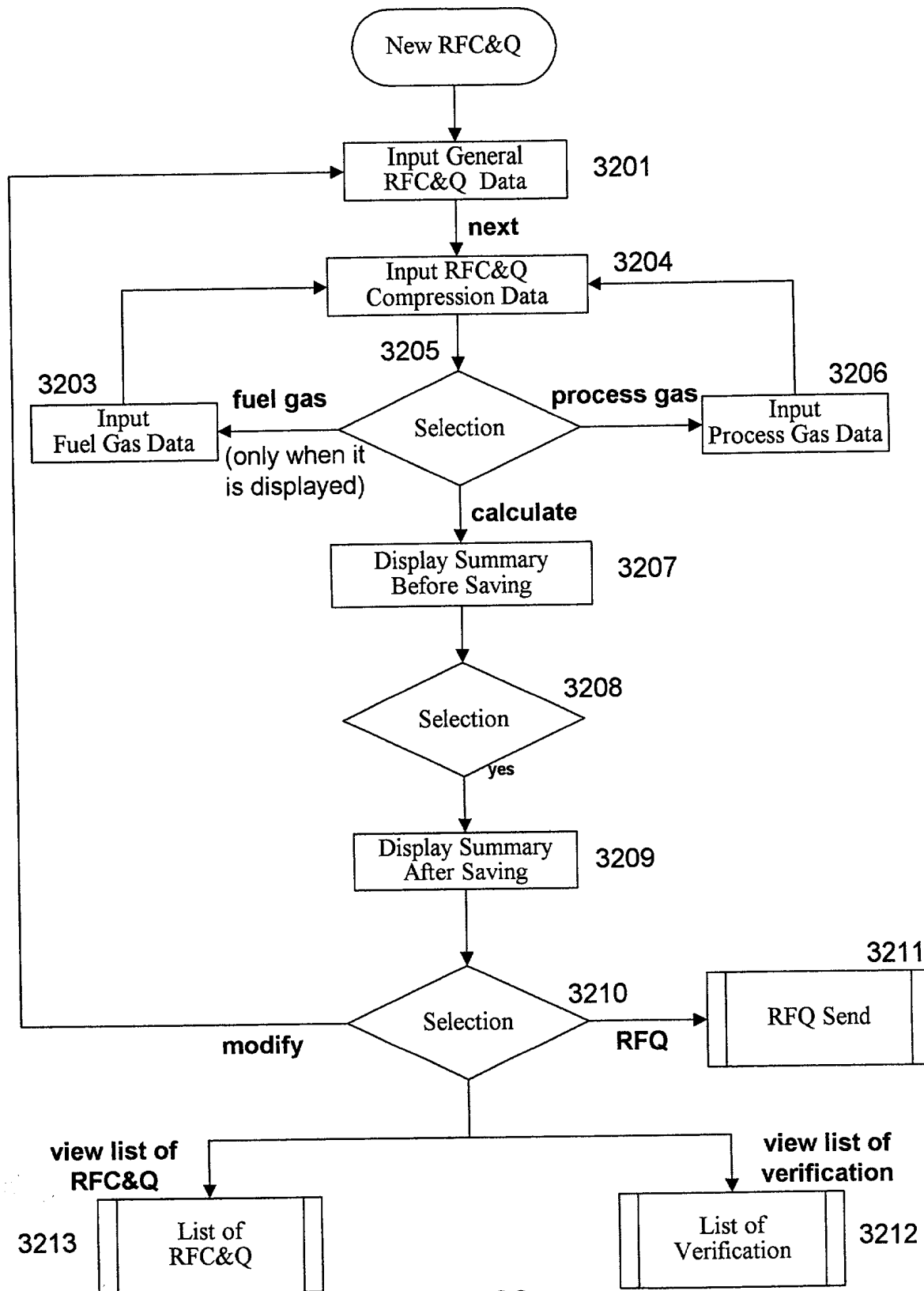


Fig. 32

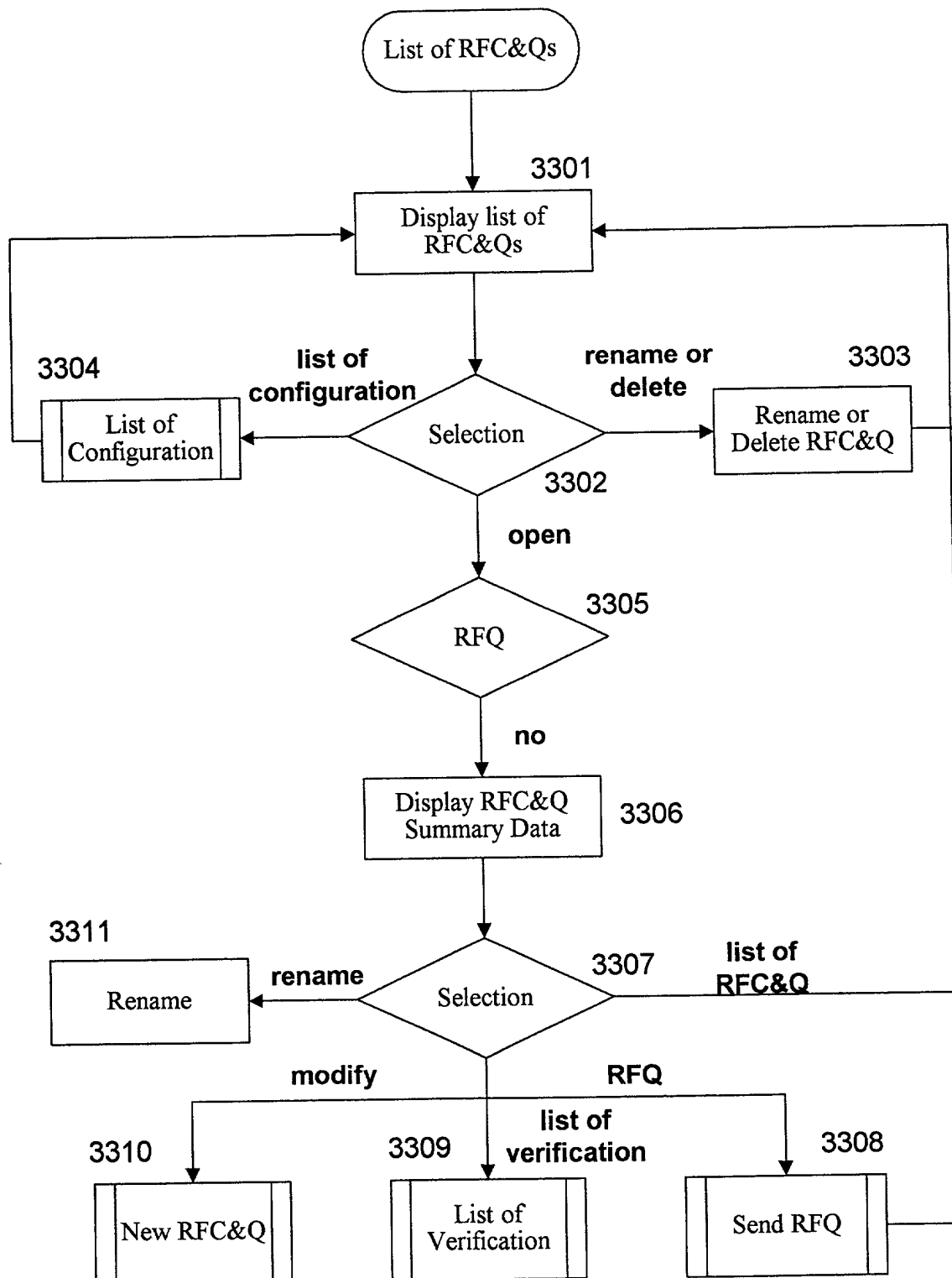


Fig. 33

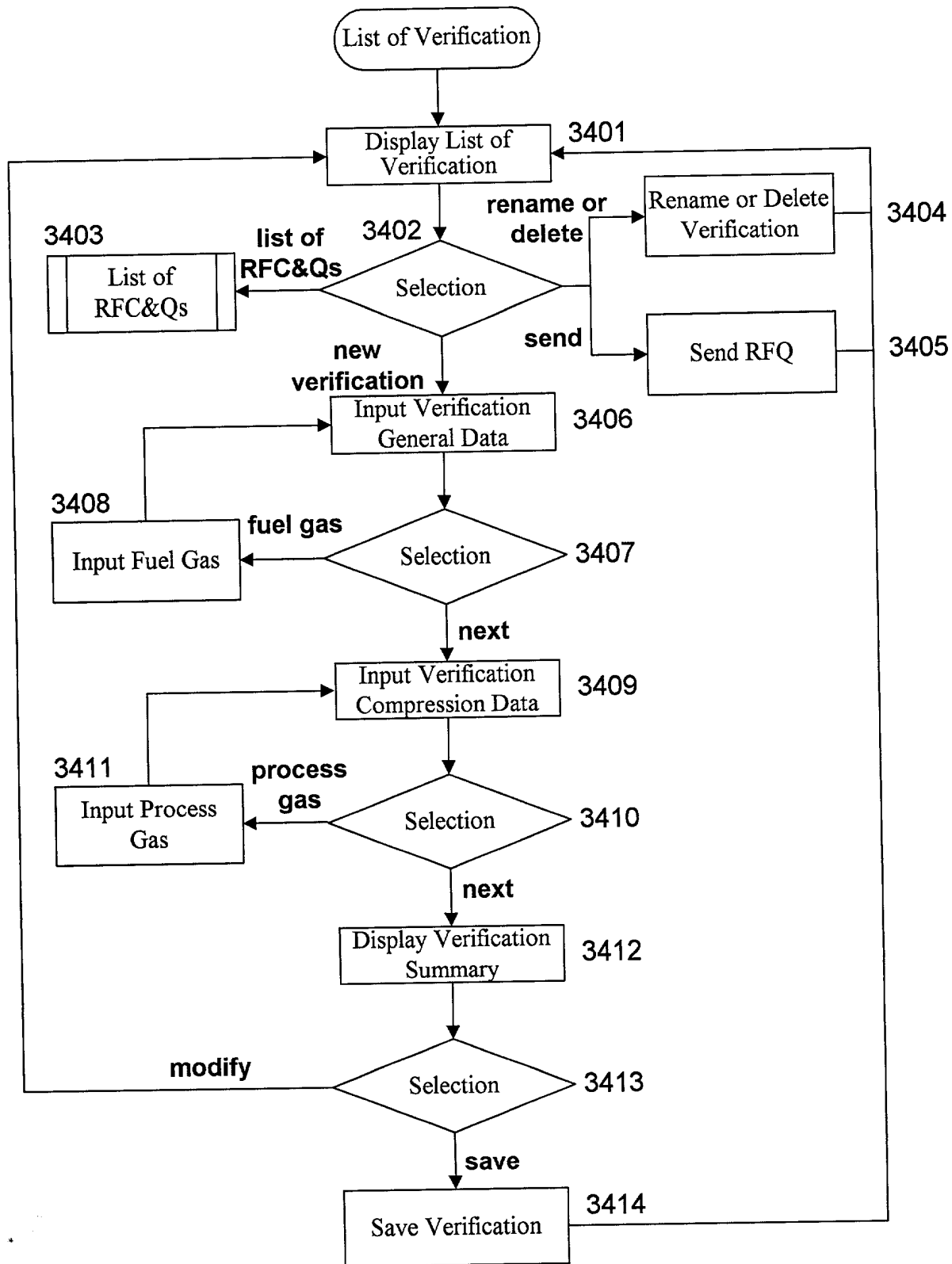


Fig. 34

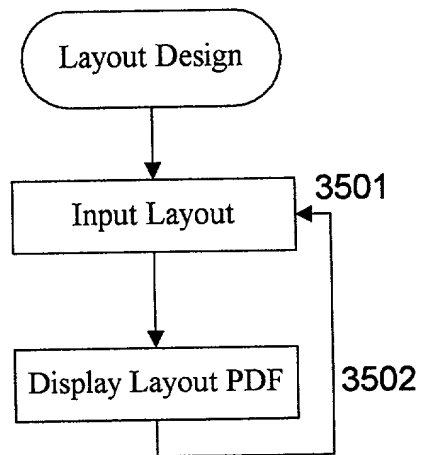


Fig. 35